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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MALLARI, PATRICIA C	
ART UNIT	**PAPER NUMBER**
3736	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/709,015	BANET ET AL.	
	Examiner	Art Unit	
	Patricia C. Mallari	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/7/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Specification

The use of the trademarks BLUETOOTH ®, GSM®, MOBITEX®, DATATAC®, and IDEN® have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 13, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 13 contain the trademark/trade name Bluetooth®. Claim 16 contains the trademarks GSM®, Mobitex®, DataTac®, and iDen®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In

the present case, the trademark/trade names are used to identify/describe various telecommunication and/or radio communication services and devices and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 8, 11, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,538,729 to Khair et al. in view of US Patent No. 6,814,705 to Kawaguchi. Khair discloses a device for monitoring a patient's blood pressure (col. 6, lines 12-16 of Khair). The device comprises an optical module comprising an optical source component 30 and optical detector 18 (fig. 3; col. 6, lines 26-37 of Khair). A hold down pressure sensor 36 comprises a pressure monitoring module comprising a pressure sensitive region (fig. 3; col. 8, lines 23-41 of Khair). A microprocessor 100 is configured to receive information from the optical module and the hold down pressure sensor 36 and processes this information to calculate a blood pressure value (figs. 12, 14; col. 13, line 5-41; col. 15, lines 21-37 of Khair). Khair teaches that the hold down pressure sensor comprises a strain gauge, which may be of the semiconductor type, but fails to specify that the sensor is of the thin film type.

However, Kawaguchi teaches a non-invasive blood pressure measuring device wherein a pressure transducer may equivalently be of semiconductor or of a thin-film

type (col. 11, lines 5-12 of Kawaguchi). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use a thin-film sensor as the hold down pressure sensor of Khair, since Kawaguchi discloses that a semiconductor and a thin film pressure sensor are functionally equivalent in pressure sensing.

Regarding claim 2, the pressure sensitive region of a semiconductor or thin film strain gauge comprises a material characterized by pressure dependent electrical properties (col. 8, lines 23-41 of Khair).

Regarding claim 4, the optical source is a laser diode (col. 7, lines 7-10 of Khair).

Regarding claim 8, a wrist mounted component 10 comprises the pressure monitoring module 36 that is part of optical sensor 12 (fig. 1 of Khair).

Regarding claim 11, the device comprises an external secondary wireless component 122, 124, wherein the transceiver module 122 and antenna 124 are external to the microcontroller (fig. 12 of Khair).

Regarding claims 17-19, the pressure monitoring module is configured to generate a pressure waveform (fig. 11; col. 11, line 53-col. 12, line 3 of Khair). With further regard to claim 18, the optical module is configured to generate an optical waveform (fig. 10; col. 9, lines 5-19 of Khair). With further regard to claim 19, the microprocessor comprises computer readable code that processes both the optical and pressure waveforms to determine blood pressure (col. 13, lines 25-41; col. 15, lines 20-37; col. 17, lines 24-29 of Khair).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Khair in view of Kawaguchi, as applied to claims 1, 2, 4, 8, 11, and 17-19 above, and further in

view of US Patent No. 6,700,174 to Miu et al. Khair, as modified is silent as to the details of the construction of a thin film pressure sensor. However, Miu discloses a thin-film pressure sensor 200 comprising a plastic film 202 over pressure sensitive region 221, 222 of the sensor 200 (fig. 2; col. 4, line 50- col. 5, line 12 of Miu). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the thin film pressure sensor of Miu in the device of Khair, as modified by Kawaguchi, since Khair, as modified teaches using a thin film pressure sensing, and Miu describes an appropriate such sensor.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Khair in view of Kawaguchi, as applied to claims 1, 2, 4, 8, 11, and 17-19 above, and further in view of US Patent No. 5,237,997 to Greubel et al. Khair, as modified discloses photodetectors 18 is silent as to any details about them. However, Greubel discloses a blood pressure measuring device comprising a light sensor, wherein the detecting portion of the sensor is a photodiode (col. 3, lines 38-42 of Greubel). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use a photodiode as the photodetector of Khair, since Khair discloses using a light detector, and Greubel describes a photodiode as an appropriate such light detector.

Claims 6 and 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Khair in view of Kawaguchi, as applied to claims 1, 2, 4, 8, 11, and 17-19 above, and further in view of US Patent No 5,752,920 to Ogura et al. Khair, as modified fails to disclose a finger worn component that comprises the optical module. However, Ogura disclose a blood pressure measuring device, wherein a pulse wave sensor, from which

blood pressure measurements are derived, may be placed on either a wrist or a finger. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to configure the device, including the band of Khair, as modified by Kawaguchi, to be placed on a finger, rather than a wrist of the patient, since Ogura teaches the placement on a finger and on a wrist as being functionally equivalent for determining blood pressure using a pulse wave sensing device.

Regarding claim 7, the band 11 is an annular ring (fig. 1 of Khair).

Claims 9, 10, 12 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khair in view of Kawaguchi, as applied to claims 1, 2, 4, 8, 11, and 17-19 above, and further in view of US Patent No. 6,618,603 to Varalli et al. Khair, as modified, discloses that the device includes an external secondary wireless component 122, 124 that transmits via a radio frequency transceiver, but fails to describe that communication further. However, Varalli et al. discloses a medical device that may employ either Bluetooth® or GSM radio frequency transmission systems for data transmission to an external component (col. 6, lines 10-14). The applicants disclose Bluetooth ® communications as being an example of short range wireless transmission (claim 10) and GSM communications as being an example of long rage wireless transmission (claim 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use Bluetooth ® or GSM technology as the radio frequency communication method of Khair, as modified by Kawaguchi, since Khair discloses using a radio frequency transceiver, and Varalli teaches Bluetooth® and GSM

communication systems as an appropriate such radio frequency transmission systems in a medical device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US Patent No. 6,468,222 to Mault et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia C. Mallari whose telephone number is (571) 272-4729. The examiner can normally be reached on Monday-Friday 10:00 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia Mallari
Patent Examiner
Art Unit 3736